

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022197**Date Inspected:** 23-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

CWI Inspectors: Mr. Lv Li Qing, Mr. Zheng Hua

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Bay 14

Segments 13E and 14E

This QA Inspector observed ZPMC welder Mr. Bian Henggui stencil 051359 used shielded metal arc welding procedure specification WPS-345-SMAW-4G(4F)-FCM-Repair -1 to make repairs to the base material adjacent to OBG segment 13CE weld SEG3011-001. ZPMC QC informed this QA Inspector that weld repair document B-WR-20466 documents weld repairs where temporary weld alignment plates had been removed. This QA Inspector observed a welding current of approximately 160 amperes (amps) and the base materials appear to have been preheated with a torch. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Zhengbin, stencil 216086 used shielded metal arc welding

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procedure WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019BB-089. This QA Inspector observed a welding current of approximately 200 amps the base materials were preheated with electrical heaters and Mr. Wang Zhengbin appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yang Yunfeng, stencil 215553 used shielded metal arc welding procedure WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019BB-133. This QA Inspector observed a welding current of approximately 160 amps the base materials were preheated with electrical heaters and Mr. Yang Yunfeng appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Zhao Guanglin, stencil 044779 used shielded metal arc welding procedure WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019BB-155. This QA Inspector observed a welding current of approximately 180 amps the base materials were preheated with electrical heaters and Mr. Zhao Guanglin appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Kuai Wenshan, stencil 054013 used shielded metal arc welding procedure WPS-B-P-2214-TC-U4B-FCM-1 to make OBG segment 14E weld SEG3019BB-177. This QA Inspector observed a welding current of approximately 185 amps the base materials were preheated with electrical heaters and Mr. Kuai Wenshan appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Changfa, stencil 058102 used shielded metal arc welding procedure specification WPS-B-P-2214-T-U4B-FCM-1 to make OBG segment 14E weld SEG3019U-001. This QA Inspector observed a welding current of approximately 170 amps, the base material had been preheated with electric heaters and Mr. Wang Changfa appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yang Junping, stencil 501946 used shielded metal arc welding procedure WPS-B-P-2114-FCM-1 to make OBG segment 14E welds SEG3019M-018 and 019. This QA Inspector observed a welding current of approximately 170 amps, the base material had been preheated with electric heaters and Mr. Yang Junping appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

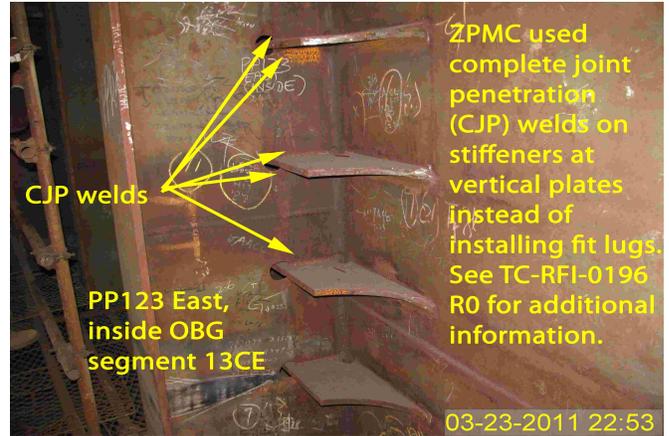
Segments 13 East and 13 West

This QA Inspector performed random document review of “Team China request for information (TC-RFI)” document #TC-RFI-0196R0 and the following observations were made:

This RFI addresses installation of fit lugs where vertical plates and stiffener plates intersect. This QA Inspector performed random visual inspections of segments 13 East and 13 West between panel points PP120 and PP124.5 and observed ZPMC appears to have installed complete joint penetration welds at these locations and no fit lugs appear to have been installed. See the photographs below for additional information.

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Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

Inspected By: Dawson,Paul

Quality Assurance Inspector

Reviewed By: Riley,Ken

QA Reviewer
